

REMARKS

Sequence Listing

In accordance with 37 C.F.R. § 1.825, Applicants submit herewith substitute pages 1- 602 which contain a substitute Sequence Listing for the above-referenced application. Applicants have also amended the specification to include substitute pages 1- 602. The specification has also been amended to insert reference to sequences included in the sequence listing. Applicants submit herewith a "**Version with Markings to Show Changes Made**," which indicates the specific amendments made to the specification.

In addition, Applicants submit herewith a computer-readable form (Compact Disk) of this sequence which is identical in substance to the substitute Sequence Listing on pages 1-602 submitted herewith. *No new matter has been added.*

Election/Restriction

The Examiner has required restriction to one of the following inventions under 35 U.S.C. §121:

- | | |
|------------|--|
| Group I: | claims 1-16 and 36-38, drawn to nucleic acids, vectors and host cells, classified in class 536, subclass 23.1; |
| Group II: | claim 17, drawn to method of producing a protein, classified in class 435, subclass 69.1; |
| Group III: | claims 18-24, drawn to isolated polypeptides, classified in class 530, subclass 350.; |
| Group IV: | claims 25-34, drawn to methods of producing chemicals by culturing, classified in class 435, subclass 41; |
| Group V: | claim 35, drawn to methods of diagnosis, classified in class 435, subclass 6. |

Applicants hereby elect, without traverse, Group I (claims 1-16 and 36-38) under 35 U.S.C. §121 for prosecution in the present application.

At page 4 of the instant Restriction Requirement, the Examiner states that:

Each of Groups I, III, IV or V above are generic to a plurality of disclosed patentably distinct groups each groups (*sic*) consisting of a different nucleic acid sequence. Applicant is required under 35 U.S.C. 121 to elect no more than one (1) disclosed sequence which cannot represent more than 1 different SEQ ID NOs even though this requirement is traversed. Whichever Group of Groups I-V is selected above, a separate selection is required for search of One single nucleotide sequence which will be searched for the group. Applicant should note that the generic claims will be examined in light of one specific SEQ ID Nos selected. This requirement is based upon the notice in the Official Gazette in October 1996.

Applicants hereby elect SEQ ID NO:1, *with traverse*. Applicants respectfully submit that the policy set forth in 1192 O.G. 68 (Nov. 19, 1996), which the Examiner references, clearly provides that a *reasonable number* of sequences are allowed to be claimed in a single application. It has been determined that "normally ten sequences constitute a reasonable number for examination purposes" and, thus, up to ten independent and distinct sequences are often examined in a single application without restriction. M.P.E.P. §804.4 and 1192 O.G. 68 (Nov. 19, 1996). In the interest of saving considerable time and cost to Applicants and the United States Patent Office, and in accordance with 1192 O.G. 68 (Nov. 19, 1996), Applicants respectfully request that at least 10 sequences be examined in the instant application.

Furthermore, it is the Applicants' position that, with respect to the claimed nucleotide sequences, a species election for searching purposes would be more appropriate in this situation.

Applicants respectfully submit that a sufficient search and examination with respect to the claimed nucleotide sequences can be made without serious burden on the Examiner. As the M.P.E.P. states:

[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. M.P.E.P. § 803.

Applicants respectfully submit that the searches with regard to each SEQ ID NO. would be co-extensive and would not involve a serious burden on the Examiner. Applicants therefore request that the Examiner re-characterize the restriction requirement with respect to the SEQ ID NOs. as a species election requirement.

It is the Applicants' understanding that under 35 U.S.C. §121, an election of a single species for prosecution on the merits is required, to which the claims will be restricted if no generic claim is finally held allowable. Applicants submits that claim 1 is generic. Applicants further understand that upon the allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which are written in dependent from or otherwise include all the limitations of an allowed generic claims as provided by 37 C.F.R. §1.41 *et seq.*

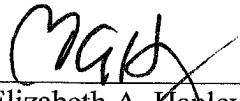
Accordingly, within Group I, Applicants hereby further elect the species of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, and SEQ ID NO:19 for search purposes only. Applicants even further elect the species of SEQ ID NO:1 for search purposes only.

Applicants reserve the right to traverse the above restriction with respect to non-elected Groups II-V in this or subsequent applications.

SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,


 Elizabeth A. Hanley, Esq.
 Registration No. 33,505
 Attorney for Applicants

LAHIVE & COCKFIELD, LLP
 28 State Street
 Boston, MA 02109
 Tel. (617) 227-7400

Dated: December 20, 2001

Version with Markings to Show Changes Made

The Sequence Listing (pages 1-602) has been replaced with the substitute Sequence Listing, pages 1-602, filed herewith.